IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: A. Anthony East
Serial No.: 10/687,528
Filed: October 16, 2003
Confirmation No.: 5223
For: **GARAGE DOOR LOCKING SYSTEM**

Examiner: Gall, Lloyd A.
Art Unit: 3676

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REPLY

This paper is in response to the Office Action mailed July 12, 2006. Please provide a one-month extension of time up to and including November 12, 2006, based on the office action mailed July 12, 2006. The Director is authorized to charge the one-month extension fee and any additional fees or credit any overpayment to Deposit Account No. 09-0528.

Please amend the above-identified application as indicated below.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 7 of this paper.

Amendments to the claims:

The following listing of the claims will replace all prior versions and listings of the claims.

Please amend the claims as indicated below:

1. (previously presented) A garage door locking system comprising:

(a) a central elongated spindle having an inside end and an outside end;

(b) an outside locking member on the outside end of the spindle;

(c) an inside locking member on the inside end of the spindle; and

(d) an actuator yoke on the inside end of the spindle, the yoke having a first end configured for connection to a first elongated lock bar, and a second end configured for connection to a second elongated lock bar, the first and second ends outwardly extending from the locking system;

wherein both the inside locking member and the outside locking member are operable to selectively permit and selectively prevent rotation of the spindle by manipulation of the outside end of the spindle.

2. (currently amended) A garage door locking system according to claim 1 wherein the ~~at least one~~ first end of the yoke also is configured for connection to an end of a snap latch cable.

3. (original) A garage door locking system according to claim 1 wherein the outside locking member is a keyed cylinder lock.

4. (original) A garage door locking system according to claim 1 wherein the inside locking member is a push-button cylinder lock.

5. (original) A garage door locking system according to claim 1 and further comprising an outside handle on the outside end of the spindle.

6. (original) A garage door locking system according to claim 1 and further comprising an inside handle on the inside end of the spindle.

7. (canceled)

8. (currently amended) A garage door locking system according to claim 1 wherein the actuator yoke includes a hub portion for connection to the inside end of the spindle ~~and two opposed ends~~, wherein the ~~opposed~~ first and second ends of the yoke are offset from the hub portion such that the ~~opposed~~ first and second ends are nearer the outside end of the spindle than the hub portion.

9. (currently amended) A garage door locking system according to claim 8 and further comprising an inside escutcheon, wherein the inside escutcheon includes a central protruding portion and a recessed portion, wherein the recessed portion provides sufficient clearance to permit selective rotation of the ~~two opposed~~ first and second ends of the yoke when the spindle rotates relative to the inside escutcheon.

10. (original) A garage door locking system according to claim 1 and further comprising an outside escutcheon.

11. (original) A garage door locking system according to claim 1 and further comprising an inside escutcheon.

12. (previously presented) A locking system for a garage door having an inside face, an outside face, and first and second opposed side edges, the locking system comprising:

(a) a spindle configured to be rotatably mounted in an aperture in the garage door, the spindle having an inside end and an outside end, wherein the inside end of the spindle inwardly extends a substantial distance from the inside face of the garage door;

(b) an offset actuator yoke having a central hub portion on the inside end of the spindle, and having opposed ends, wherein the central hub is proximate to the inside end of the spindle and the opposed ends outwardly extend from the locking system and are substantially proximate to the inside face of the garage door when the spindle is rotatably mounted in the garage door aperture and the central hub is mounted on the spindle;

(c) an outside locking cylinder on the outside end of the spindle; and

(d) an inside locking cylinder on the inside end of the spindle;

wherein both the inside locking cylinder and the outside locking cylinder are operable to selectively permit and selectively prevent rotation of the spindle by manipulation of the outside end of the spindle.

13. (original) A locking system according to claim 12 and further comprising an inside escutcheon configured for attachment on the inside face of the garage door, wherein the inside escutcheon includes a raised central portion and a recessed outer portion such that the recessed outer portion provides sufficient clearance to permit rotation of the opposed ends of the yoke relative to the inside escutcheon.

14. (original) A locking system according to claim 13 and further comprising an outside escutcheon configured for attachment on the outside face of the garage door.

15. (original) A locking system according to claim 12 and further comprising an outside handle on the outside end of the spindle and an inside handle on the inside end of the spindle.

16. (canceled)

17. (previously presented) A locking system according to claim 12 wherein the outside locking cylinder is a keyed locking cylinder.

18. (canceled)

19. (previously presented) A locking system according to claim 12 wherein the inside locking cylinder is a push-button locking cylinder.

20. (previously presented) A garage door lock comprising inside and outside coaxial locks on respective inside and outside ends of a central spindle, and an offset yoke on the spindle configured for selective connection to first and second slidable lock bars or first and second snap latch cables, wherein both the inside lock and the outside lock are operable to selectively permit and selectively prevent rotation of the spindle by manipulation of the outside end of the spindle.

21. (original) A garage door lock according to claim 20 wherein the offset yoke on the spindle is configured for selective connection to first and second slidable lock bars or first and second snap latch cables.

22. (original) A garage door lock according to claim 20 and further comprising an inside handle and an outside handle on the spindle.

23. (original) A garage door lock according to claim 20 and further comprising an inside escutcheon and an outside escutcheon.

24. (original) A garage door lock according to claim 23 wherein the inside escutcheon includes a raised central portion and a recessed outer portion such that the recessed outer portion provides clearance for rotation of the yoke relative to the inside escutcheon.

Remarks

Claims 1-15, 17 and 19-24 are pending in the application. Claims 2 and 7-9 are objected to because of informalities. Claims 2, 8 and 9 have been amended. Claim 7 has been cancelled. Claims 1-15, 17 and 19-24 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Claim 7 has been canceled. The Applicant respectfully traverses the rejection of Claims 1-6, 8-15, 17 and 19-24 under 35 U.S.C. 112, first paragraph. Claims 1-7, 10-15, 17 and 19-24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 1,495,820 to **Tierney** in view of U.S. Pat. No. 5,713,612 to **Kajuch**. Claim 7 has been canceled. The Applicant respectfully traverses the rejection of Claims 1-6, 10-15, 17 and 19-24 under 35 U.S.C. 103(a). Claims 8 and 9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over **Tierney** in view of **Kajuch**, and further in view of U.S. Pat. No. 5,180,201 to **Hauber**. The Applicant respectfully traverses the rejection of Claims 8 and 9 under 35 U.S.C. 103(a).

I. Claims 2, 8 and 9 are in Proper Form

Claims 2 and 7-9 are objected to because of informalities. Claims 2, 8 and 9 have been amended to correct the matters of form identified in the Office Action. Claim 7 has been cancelled. The Applicant believes that Claims 2, 8 and 9 are in proper form, and the objection to these claims should be withdrawn.

II. Claims 1-6, 8-15, 17 and 19-24 are Adequately Enabled by the Written Description

Claims 1-15, 17 and 19-24 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Claim 7 has been canceled. The Applicant respectfully traverses the rejection of Claims 1-6, 8-15, 17 and 19-24 under 35 U.S.C. 112, first paragraph.

The Office Action states that "the written disclosure does not set forth how the inside locking member and outside locking member are operable to permit and selectively prevent

rotation of the spindle by manipulation of the outside end of the spindle, as set forth in the independent claims" The Applicant respectfully disagrees.

As presented below, Table 1 summarizes the limitations of Claim 1, and the corresponding portions of the specification that constitute a written description of at least one embodiment of the invention and the manner and process of making and using the described embodiment in full, clear, concise, and exact terms that are sufficient to enable a person skilled in the art to make and use the invention as required by 35 USC 112, first paragraph.

Table 1

Claim 1	Excerpts from Specification	Ref.
A garage door locking system comprising:	"A garage door locking system..." "Figures 9-13 show various aspects of an embodiment 100 of a locking system according to the invention."	p. 3, line 22; Figs. 9-13. p. 5, lines 22-23; Figs. 9-13.
(a) a central elongated spindle having an inside end and an outside end;	"As shown in Figures 9-11, the locking system 100 includes a central spindle 102 extending between an inside handle 106 and an outside handle 104. Preferably, the spindle 102 has a square or other non-round cross-section."	p. 6, lines 3-5; Figs. 9-11.
(b) an outside locking member on the outside end of the spindle;	"As shown in Figures 9 and 12, the outside handle 104 includes a conventional keyed lock cylinder 120 that extends through the outside escutcheon 112 and receives an outside end 164 of the spindle 102."	p. 6, lines 8-10; Figs. 9 and 12.
(c) an inside locking member on the inside end of the spindle; and	"As shown in Figures 10 and 12, the inside handle 106 includes a conventional push-button lock cylinder 122 that extends through the inside escutcheon 114 and receives an inside end 160 of the spindle 102."	p. 6, lines 15-18; Figs 10 and 12.
(d) an actuator yoke on the inside end of the spindle, the yoke having a first end configured for connection to a first elongated lock bar, and a second end configured for connection to a second elongated lock bar, the first and second ends outwardly extending from the locking system;	"As shown in Figures 9, 11, and 12, an actuator yoke 108 is positioned on the inside handle 106 adjacent to the inside escutcheon 114. The yoke 108 includes a central hub portion 109 and two opposed radially extending ends 110, 111." "As shown in Figure 13, the ends 110, 111 of the yoke 108 are configured for attachment to either a conventional lock bar 8 or a conventional snap latch cable 28."	p. 6, lines 19-21, Figs. 9, 11 and 12. p. 8, lines 14-15; Fig. 13
wherein both the inside locking member and the outside locking member are operable to selectively permit and selectively prevent	"In operation, the locking system 100 permits a door such as a garage door to be selectively locked, unlocked, latched, and unlatched."	p. 8, lines 21 – 22.

rotation of the spindle by manipulation of the outside end of the spindle.	"To operate the system from the outside of a door, a key 105 is inserted into the outside lock cylinder 120 to either lock or unlock the outside handle 104. When locked, the handle 104 and connected spindle 102 are prevented from rotating, and cannot be used to rotate the yoke 108 to disengage connected lock bars or snap latches that prevent the door from opening. When unlocked, the outside handle 104 and spindle 102 are free to rotate, and attached lock bars or snap latches can be selectively engaged or disengaged by rotating the handle 104 to latch or unlatch the door."	p. 8, line 22 – p. 9, line 6.
	"The inside lock 122 is locked by rotating the inside handle 106 until the yoke 108 is in a locked position, causing the button 122 to pop up. When the button 122 is in the up or locked position, the outside handle 106 and spindle 102 are prevented from rotating, and cannot be used to rotate the yoke 108 to disengage connected lock bars or snap latches that prevent the door from opening. Accordingly, the door can be locked from either inside or outside the door. If the inside handle 106 is locked, depressing the button 122 causes the inside lock 122 to disengage the spindle 102, and permits the door to be opened from either the inside or the outside."	p. 9, lines 7-14.

Accordingly, the described outside keyed lock cylinder 120 is operable to selectively prevent rotation of the spindle 102 (and thus the inside handle and yoke connected thereto) by manipulation of the outside end of the spindle (such as by manipulation of the outside handle 106) when the lock cylinder 120 has been locked with a key. In addition, the described outside keyed lock cylinder 120 is operable to selectively permit rotation of the spindle 102 (and thus the inside handle and yoke connected thereto) by manipulation of the outside end of the spindle (such as by manipulation of the outside handle 106) when the lock cylinder 120 is unlocked and the button of the inside lock 122 is depressed (unlocked). Furthermore, the described inside push-button lock cylinder 122 is operable to selectively prevent rotation of the spindle 102 (and thus the inside handle and yoke connected thereto) by manipulation of the outside end of the spindle (such as by manipulation of the outside handle 106) when its button is up (not depressed). In addition, the described inside push-button lock cylinder 122 is operable to selectively permit rotation of the spindle 102 (and thus the inside handle and yoke connected

thereto) by manipulation of the outside end of the spindle (such as by manipulation of the outside handle 106) when its button is depressed.

The configuration and operation of the described locking system 100 is summarized below in Table 2.

Table 2. Summary of Operability of Described Lock and Locking System

Outside Lock	Inside Lock	Rotate Spindle and Yoke with Outside Handle?	Rotate Yoke with Inside Handle?
Locked	Button Depressed (unlocked)	NO	YES
Locked	Button Up (locked)	NO	NO
Unlocked	Button Depressed (unlocked)	YES	YES
Unlocked	Button Up (locked)	NO	NO

The Office Action states, "It is not clear as to whether the lock cylinder and push-button themselves only is disclosed as conventional, or their operation with a spindle as claimed in the last three lines of claim 1, for example." The Applicant disagrees. The Applicant believes that a person of ordinary skill in the art at the time of the invention would understand from the written description and Figures (as discussed above) that 1) the outside locking cylinder is conventional in the way that it functions to selectively prevent rotation of the spindle when locked; and 2), the inside push-button locking cylinder is conventional in the way that it functions to selectively prevent rotation of the inside handle and yoke connected thereto (and thus, the spindle) and to selectively permit rotation of the inside handle and yoke independent of any rotation or non-rotation of the spindle. As described in the specification, the inside and outside locking cylinders operate independently to permit or prevent rotation of the spindle by manipulation of the outside end of the spindle.

Accordingly, the Applicant believes that the written description and Figures provide a full, clear, and concise description in exact terms of the invention as recited in independent Claim 1 and dependent claims 2-6 and 8-11. For the same reasons, the written description and

Figures provide a full, clear, and concise description in exact terms of the invention as recited in independent Claims 12 and 20 and dependent Claims 13-15, 17, 19, and 21-24. Accordingly, the rejection of Claims 1-6, 8-15, 17 and 19-24 under 35 U.S.C. 112, first paragraph, should be withdrawn.

III. The Office Action Has Not Made a Prima Facie Case of Obviousness as to Claims 1-6, 8-15, 17 and 19-24

The Examiner has the burden to establish a *prima facie* case of obviousness when rejecting claims under 35 U.S.C. §103(a). *See* MPEP 2142. To establish a *prima facie* case of obviousness, three basic criteria must be met. *See* MPEP 2143. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *See* Id. Indeed, the proposed modification cannot render the prior art unsatisfactory for its intended purpose and cannot change the principle of operation of a reference. *See* MPEP 2143.01. Second, there must be a reasonable expectation of success. *See* MPEP 2143. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *See* Id. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *See* Id. (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)).

A. Claims 1-6, 10-15, 17 and 19-24 are Patentable Over Tierney in View of Kajuch

Claims 1-7, 10-15, 17 and 19-24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 1,495,820 to **Tierney** in view of U.S. Pat. No. 5,713,612 to **Kajuch**. Claim 7 has been canceled. The Office Action states: "It would have been obvious to modify the **Tierney** inside handle 2 to include an inside locking member push-button to cooperate with the keyed cylinder and selectively permit and prevent rotation of the spindle 19 by manipulation of the outside end of the spindle, in view of the teachings of **Kajuch** and applicant's admitted prior art, the motivation being to optimize the security of the locking system

against unauthorized access. The Applicant disagrees, and respectfully traverses the rejection of Claims 1-6, 10-15, 17 and 19-24 under 35 U.S.C. 103(a).

Independent Claims 1 and 12 each recite a garage door locking system that includes a spindle, an outside locking member or cylinder on an outside end of the spindle; an inside locking member or cylinder on an inside end of the spindle, and an actuator yoke having first second outwardly extending ends. Independent Claim 20 similarly recites a garage door lock having inside and outside coaxial locks on respective inside and outside ends of a central spindle. Claim 12 further requires that the yoke be "offset" such that its central hub is proximate to the inside end of the spindle, and its ends are substantially proximate to the inside face of a garage door to which the locking system is assembled. Independent Claims 1 and 12 also both require that both the inside locking member or cylinder and the outside locking member or cylinder be operable to selectively permit and selectively prevent rotation of the spindle by manipulation of the outside end of the spindle.

In contrast, neither **Tierney** nor **Kajuch** describe a garage door locking system of any type. Indeed, both references describe locks for hinged, swinging doors, not upward moving garage doors. In addition, neither **Tierney** nor **Kajuch** describe separate outside and inside locking members or cylinders as recited in the subject claims. To the contrary, **Tierney** describes a single "rotary key cylinder" (Col. 2, line 106), and is completely unconcerned with a locking system that permits selectively locking and unlocking a door from either the inside or outside of the door. Indeed, **Tierney** teaches away from a locking system that includes both an inside locking member or cylinder and an outside locking member or cylinder that both are operable to selectively permit and selectively prevent rotation of a spindle by manipulation of an outside end of the spindle. **Kajuch** also fails to disclose a locking system having separate inside and outside locking members or cylinders. Rather, **Kajuch** describes a single outer lock cylinder that can be locked or unlocked from the outside with a key, can be locked from the inside by depressing the button 38, and can be unlocked from the inside by turning lever 36. (*See* **Kajuch**, Col. 2, lines 50-65). Furthermore, neither **Tierney** nor **Kajuch** describe an "offset yoke" as recited in independent Claim 12. To the contrary, **Tierney** only describes a planar bolt-operating element

16 (*see* Figs. 2 and 3 of **Tierney**), and **Kajuch** only describes a substantially planar spring driver 32 (*see* Fig. 1 of **Kajuch**). Thus, the combination of **Tierney** and **Kajuch** does not disclose all of the claim limitations of any one of claims 1-6, 10-15, 17 and 19-24. Accordingly, the Office Action does not set forth a prima facie case of obviousness, and the rejection of claims 1-6, 10-15, 17 and 19-24 under 35 USC 103(a) should be withdrawn.

In addition, the Office Action does not identify any specific teaching or suggestion in the cited references, or in the prior art in general, for modifying or combining the references. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. Accordingly, the Office Action does not set forth a prima facie case of obviousness, and the rejection of claims 1-6, 10-15, 17 and 19-24 under 35 USC 103(a) should be withdrawn.

B. Claims 8 and 9 are Patentable over Tierney in View of Kajuch and Hauber

Claims 8 and 9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over **Tierney** in view of **Kajuch**, and further in view of U.S. Pat. No. 5,180,201 to **Hauber**. The Applicant respectfully traverses the rejection of Claims 8 and 9 under 35 U.S.C. 103(a).

Claim 8 depends from Claim 1, and claim 9 depends from claim 8. As discussed above, the combination of **Tierney** and **Kajuch** does not include every limitation recited in Claim 1, and therefore also does not describe every limitation recited in Claim 8 or in Claim 9. **Hauber** also fails to disclose separate inside and outside locking members or cylinders that both are operable to selectively permit and selectively prevent rotation of a spindle by manipulation of an outside end of the spindle. To the contrary, the latch described in **Hauber** cannot be locked at all from the inside. Thus, the combination of **Tierney, Kajuch**, and **Hauber** does not disclose all of the claim limitations of Claim 8 or Claim 9. Therefore, the Office Action does not set forth a prima facie case of obviousness, and the rejection of claims 8 and 9 under 35 USC 103(a) should be withdrawn.

In addition, the Office Action does not identify any teaching or suggestion in the cited references, or in the prior art in general, for modifying or combining the references. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. Accordingly, the Office Action does not set forth a prima facie case of obviousness, and the rejection of claims 8 and 9 under 35 USC 103(a) should be withdrawn.

Conclusion

The Applicant believes this case is now in condition for immediate allowance of Claims 1-6, 8-15, 17 and 19-24, and such action is respectfully requested. If any issue remains unresolved, however, Applicant's attorney welcomes the opportunity for a telephone interview to expedite allowance and issue.

Respectfully submitted,

Jeffrey R. McFadden
Registration No. 46,916

Womble, Carlyle, Sandridge, & Rice PLLC
P.O. Box 7037
Atlanta, GA 30357-0037
(336) 721-3730

Craig H. Popalis
Registration No. 49,028

Womble, Carlyle, Sandridge, & Rice PLLC
P.O. Box 7037
Atlanta, GA 30357-0037
(336) 574-8099

Date: 11-10-06

Attorney File No.: A10019.0025.7